Rejection Based on Walters and Hoffert

Claims 1-34 stand rejected under 35 U.S.C. § 103(a) as being obvious over Walters (USPN 4,408,272) in view of Hoffert (USPN 5,502,837). Applicant notes that the current rejection is identical to the rejections presented in the previous Office Action dated June 15, 2000. In the response previously filed on September 5, 2000 ("September 5 Response"), Applicant traversed all rejections. Applicant maintains the traversal arguments.

In addition, Applicant makes the following observations. Independent claims 1 recites in part "a serial-to-parallel converter <u>receiving the clock signal,</u> the mode signal and serial data, and converting the serial data into parallel data" (emphasis added). Also, independent claim 16 recites in part "a parallel-to-serial converter <u>receiving the clock signal,</u> the mode signal and parallel data, and converting the parallel data into serial data" (again, emphasis added). As noted previously, neither Walters nor Hoffert discloses or suggests at least these claimed features.

The Examiner admits that Walters <u>fails to show a selection of a clock signal</u> in response to a mode signal (see p. 3, lines 1-2 of the June 15, 2000 Office Action and p. 3, lines 1-2 of the current Office Action). Then it must be that the Walters cannot disclose or suggest either a serial-to-parallel converter or a parallel-to-serial converter <u>receiving the clock signal</u> and converting the data, respectively.

In the "Response to Arguments" section of the current Office Action (dated October 24, 2000), the Examiner states, "Applicant argues that Walters

does not disclose a serial/parallel or parallel/serial converter" (see item 3, line 3). The Examiner then went on to describe how Walters discloses a converter.

Unfortunately, it appears that the Examiner did not realize the full context of the traversal argument made. Applicant agrees that Walters discloses a shift register 120, which acts as a serial to parallel converter.

However, Applicant argued that Walters does not disclose or suggest a converter <u>receiving the clock signal</u> and converting the data, as recited in the independent claims. As noted in the September 5 Response, Walters does not disclose or suggest such a feature since, as the Examiner readily admits, Walters does not disclose or suggest a selection of a clock signal in the first place.

Applicants also noted that Hoffert also fails to disclose or suggest at least the same feature. Because neither Walters nor Hoffert shows the recited feature, it must be that the combination of Walters and Hoffert fails to show the same recited feature.

Also, in the "Response to Arguments" section, the Examiner states, "Hoffert is combined with Walters reference to meet the functional limitations of the claimed language" (see item 3 of the Office Action, lines 10-11). Then the Examiner merely declares, "The combination of Walters and Hoffert references meet the claimed language by providing a converter which can accommodate a plurality of data lengths." (see item 3 of the Office Action, lines 11-13).

The Examiner has not met the burden of establishing a prima facie case of obviousness. More specifically, the Examiner has not demonstrated that the proposed combination of Walters and Hoffert <u>would</u> have resulted in the invention as claimed. That the references <u>could</u> have been combined is not the standard of obviousness. MPEP clearly states "The references must be considered <u>as a whole</u> and <u>must suggest the desirability</u> and thus the obviousness of making the combination" (see §2141, p.2100-90 of Feb. 2000 Rev. 1).

When taken as a whole, Hoffert clearly suggests dividing a constant length data – 128 bits of information – into one of 4 pixels of 32 bit depth, 8 pixels of 16 bit depth, and 16 pixels of 8 bit depth. Hoffert's device then delivers the information 4 pixels at a time to the MDI 14 for processing.

On the other hand, when taken as a whole, Walters contemplates determining the data length of the information to be converted and then appropriately adjusting the number of clocks to be applied so that the information can be converted properly.

The Examiner has not demonstrated, other than an unsupported assertion, how the combination Walters and Hoffert suggests the recited features of the independent claims to one of ordinary skill in the art. Indeed, the references appear to teach away from each other since Walters is concerned with converting <u>different lengths data</u> and Hoffert is concerned with delivering <u>a constant length data</u>. How can this inconsistency be resolved so that one of ordinary skill in the art would have been motivated to combine the references?

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Thus the Examiner has not met the burden of establishing a prima facie case of obviousness.

Further in the "Response to Arguments" section, the Examiner states, "The type of data to be driven by the clock signal is not at issue ... but the selection of the length of data to be driven by the clock signal is." Apparently, this is in response to the Applicant's argument that Hoffert is silent whether any parallel data is converted to serial data or vice versa, as is required by the claims.

The Examiner is mistaken. Apparently, the Examiner has assumed that handling of data of different lengths is the gist the invention. The MPEP also clearly states that "Distilling an invention down to the gist or thrust of an invention disregards the requirement of analyzing the subject matter as a whole" (emphasis added, see MPEP §2141.02 – p.2100-94 of Feb. 2000 Revision).

In addition, MPEP also states, "A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention" (emphasis added). Applicant has clearly demonstrated that at least Hoffert teaches away from the invention since it is concerned with handling a constant length data and not with different length data. It also appears fairly evident that the Examiner has not taken the prior art teachings as a whole.

For at least the above stated reasons, independent claims 1 and 16 are not rendered obvious by the combination of Walters and Hoffert. Claims 2-15

and 17-34 depend from independent claims 1 and 16. Therefore, these dependent claims are also not rendered obvious by the combination of Walters and Hoffert for at least the reasons stated with respect to claims 1 and 16.

In addition, Applicant disagrees with the Examiner's rejection of dependent claims 33 and 34 for the following reasons. Claim 33 recites, in part "wherein the amount of <u>time spent converting</u> the serial data into parallel data <u>for both the first and second data lengths is constant</u>" and claim 34 recites, in part "wherein the amount of <u>time spent converting</u> the serial data into parallel data <u>for both the first and second data lengths is constant</u>" (emphasis added).

Applicant previously noted that Walters uses the length parameters L1 and L0 to determine the number of time the shift registers 20 and 120 are to be shifted (column 3, line 39-43 of Walters). When the shift registers are shifted an appropriate number of times, such as 20, 16 or 8, data conversion is complete. It is important to note that the clock rate stays the same. Thus, for different data lengths, the times spent converting the data are different.

Hoffert cannot cure this deficiency. First, Hoffert doesn't even contemplate converting data from serial/parallel to parallel/serial. Hoffert is merely concerned delivery of 128 bits of pixel data to the MDI 14 for processing.

Second, Hoffert's device always transfers 128 bits of pixel information to MDI 14 on every rising edge of the VSCLK 20. The point is that the VSCLK 20 may be slowed or sped up to synchronize the delivery to the video bus 15. In

other words, the times spent delivering a <u>constant length data</u>, 128 bits, <u>are</u> <u>different</u>. This is a complete antithesis to the recited feature which requires time spent converting <u>different length data to be a constant</u>.

Thus, neither Walters nor Hoffert discloses or suggests at least the above recited features of claims 33 and 34. It follows that the combination of Walters and Hoffert cannot disclose or suggest at least the same recited features. Therefore, for at least these additional reasons, claims 33 and 34 cannot be rendered obvious by the combination of Walters and Hoffert.

For at least the reasons stated above, Applicant respectfully requests the Examiner to withdraw this Section 103 rejection of claims 1-34 based on Walters and Hoffert.
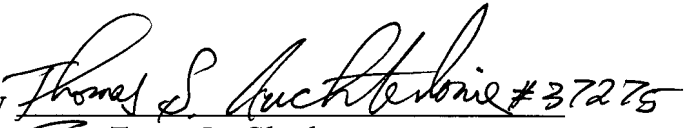
CONCLUSION

For the foregoing reasons, Applicant respectfully requests the Examiner to withdraw all of the objections and rejections.

Should there be any outstanding matters which need to be resolved in the present application, the Examiner is respectfully requested to contact Hyung Sohn (Registration No. 44,346) at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment from or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §1.16 or under 37 C.F.R. §1.17; particularly, the extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASH & BIRCH, LLP

By _Thomas S. Luchterhonie #37275_

Terry L. Clark
Registration No. 32,644
P.O. Box 747
Falls Church, VA 22032-0747
(703) 205-8000

TLC/HNS:lmh